



## INTEROFFICE MEMORANDUM



000023748

DATE: March 9, 1993

TO: T. A. Bittner

FROM: J. H. Templeton

SUBJECT: Rocky Flats Solar Pond/Pondcrete Stabilization Project  
Brown & Root Job No. JR-1198

REFERENCE: Review of Feasibility Study for Building 374 Pondsludge Processing

While reviewing the above referenced document to determine what EG&G might be considering for the pondsludge processing, I noted that the document makes many disturbing statements regarding the HNUS C Pond Process. Some examples follow.

- Page 4 2nd ¶ - "Halliburton's previous experience is processing high-viscosity, high-density oil-field slurries." They are confusing Halliburton Services' and HNUS's experience and capabilities.
- Page 5 1st ¶ - "The results [HNUS Characterization testing] had inconclusive data that required some of the tested chemical components to be estimated. The difficulties with obtaining consistent results from the analysis provides an indication of the chemical complexity of the Solar Pond material." ... "Any proposed resolution will require full and complete analysis of the pond material." First, inconsistency is due to an unhomogenized pond, and the order of inconsistency is negligible for what we are trying to accomplish. Second, the characterization sampling and testing is adequate for unhomogenized ponds. and to require full and complete analysis would require using the **entire** pond contents as a single sample.
- Page 5 3rd ¶ - This begins with many true statements regarding hydrated salt chemistry and finishes with unsubstantiated opinion. Overall, at the minimum it implies, if not directly states, that the C Pond Treatability Study mix recipe will not produce a stable waste form since the wasteform is porous, and the unhydrated salt formed during cement curing, will absorb water from the cement, causing the waste form to expand. If this were the case, we would have observed the accelerated effect in our wet/dry testing.

They do not have to take just our word, as the Army Corp of Engineers also recommended cement based stabilization.

**I think we need to find out what the DOE thinks of this study, and if they actually consider it a serious piece of work, HNUS should provide a formal response, drawing on the talents of Messrs. Brenneman, Mathew, Ninesteel, and yourself.**

attachment 1  
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These are only a few of my comments, with more annotated on the attached pages. While many of my comments deal with the impracticality of what they propose, overall, I want to convey that whoever prepared this study does not have the understanding of the pond contents or the resulting impacts on process design that HNUS has obtained.

Attachments: Pages 3 to 16 of above referenced document

cc: JAS/JRZ/B&R Project File